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Technical and Adult Education in Wisconsin for

1975-1977

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#### ABSTRACT

The purpose of the study was to determine the priority areas for research as perceived by vocational, technical, and adult educators in Wisconsin at the post-secondary level. A survey of approximately 500 Wisconsin Association of Vocational, Technical and Adult Education (VTAE) district administrative and supervisory staff was conducted using a 45-item, five-point Likert-type questionnaire. Tabulations of responses from 360 returns provided rank orders of research areas on the basis of numerical values of means for each item for the State total, by title of job, area of work, and VTAE district. The top five areas based on State total data were: labor market requirements; determining performance levels of competencies for job entry; assessment of individual's vocational, technical, and adult education needs; open entry/open exit education; and student attrition/withdrawals. Additional comments and suggestions which appeared on the questionnaires are listed. Conclusions were that means values and item rankings varied noticeably among respondents by title of position, area of work, and VTAE district and that the instrument and procedures followed were effective. Recommendations for using the findings are included. A copy of the questionnaire and the letter used with it are appended. (Author/MS)

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Prepared for the
Research Committee of the Wisconsin
Association of Vocational, Technical and Adult
Education Administrators

by

The Research Coordinating Unit (RCU)

From

Computer Printouts Processed at UW-Stout

In Cooperation With
The Subcommittee on Research Priorities

February 1975

Wisconsin Board of Vocational, Technical and Adult Education Madison, Wisconsin

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

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#### FOREWORD

Educational research, in this research oriented world, has made many contributions to education and is being looked to more and more for solutions to problems of our contemporary society.

The design and systematic inquiry of educational research; the development and conduct of experimental, pilot, field test, demonstration, and development projects; and the diffusion and utilization of the results are indispensable to the future of vocational education. Educators and researchers must strive to overcome those obstacles which hinder the performance of functions and accomplishment of mission. Vocational education agencies, institutions and departments must assess their strengths and weaknesses; identify and solve their problems; assess progress toward meeting their goals; and provide objective data and information for development of innovative programs and improvement of existing practices to meet changing educational needs.

This report should assist in the planning and management of vocational education research in Wisconsin. It is intended to aid in narrowing the gap between researc to be conducted and the solution of educational problems by providing a prioritized list of problem areas needing study as perceived by vocational, technical and adult educators in Wisconsin at the post secondary level. Consequently, it is hoped that researchers will be stimulated to conduct needed research in relevant problem areas, and that funds will be available to support research in accordance with priorities identified. This document can assist administrators when issuing requests for proposals, and research project review teams in the evaluation, approval, and disapproval of project applications. It can be used by the Research Committee of the Wisconsin Association of Vocational, Technical and Adult Education Administrators when developing its recommendations for research priorities.

The Subcommittee on Research Priorities

Dr. Max Farning, Chairman Dr. Orville Nelson, UW-Stout Roland Krogstad, RCU, WBVTAE Richard Roder, R & D, WITI



#### CHAPTER I

#### INTRODUCTION

<u>Purpose</u>: The overall purpose of this study was to determine priority areas for research in Wisconsin's postsecondary vocational, technical and adult education system for FY's 1975-1977.

Need: Although acquisition of knowledge for its own sake can be defended as a socially desirable goal, any publicy supported research project must show that its research results are being applied for the public good. The gap between the findings of research and their application points to the need for development of valid lists of research problems and priorities as perceived by vocational educators.

Two studies through UW-Stout have previously identified research priorities for vocational education in Wisconsin. The projects using thousands of dollars have been conducted in accordance with these priorities and their impact has been assessed through a recent study conducted by the Center for Vocational Education, Ohio State University. The findings of this study suggest that priorities for research be periodically reviewed and re-established.

The increased number of innovations being tried in the educational arena, the technological changes occurring in the world of work, the pressures for immediate solution to problems, the limitations of funds, irrelevancy of some research, lack of utilization of findings, and the overriding press for accountability all point to the need for improving educational research and reassessing research priorities. The research conducted and reported should be of the kind which educators can utilize effectively.

Research: Webster's Third New International Dictionary defines research as "critical and exhaustive investigation or experimentation having for its aim the discovery of new facts and their correct interpretation, the revision of accepted conclusions, theories, or laws in the light of newly discovered facts, or the practical applications of such new or revised conclusions, theories or laws."

Research as a process may be referred to as one of the systematic problem - solving strategies to discover solutions to specific problems. It is a tool of the decision maker.

There are many different types or methods of research; research designs; and statistical methods which may be used in the investigation and solution of educational problems.

Applied Research: Debate continues in education over whether the emphasis should be placed on basic research or on applied research. Applied research aims at finding the solution to some practical problem or difficulty in a localized situation. What is needed is increased relevancy and utilization of research through interaction and cooperation among the researchers and the practitioners using the team approach to identify the problems. The type of research depends upon the viewpoint or intent of the investigator and the nature of the problem to be solved. Applied researchers should be more conscious of the social utility of their work than are basic researchers and scientists.



Many applied researchers reside within the vocational education establishment and are exposed to the problems of practitioners. The educator can be involved in the research process both as a consumer of research and/or as a producer of research. Those who become involved in studies of their problems will be more likely to accept, diffuse, and utilize the results.

Research Problems: The identification of research problem areas and adequate statement of research problems are two of the most important parts of research. Yet, under the present conditions of rapid change, researchers may have difficulty identifying the most crucial and most promising areas for study.

Occupational education provides an almost unlimited field from which to select an appropriate problem. There are a number of lists of research problem areas and priorities which emanate from national, regional and state levels. Very often, however, the most difficult task in planning a research project is to distinguish between a topic or research problem area and a researchable problem

A problem area is a very <u>broad problem</u> which exists in society or education which is broad in scope and, therefore, too complex or poorly defined to study in one relatively small research project. The variety of implications, variables, and alternative ways of looking at the problem, usually indicate that a problem area must be restricted to a much smaller workable unit before a possible approach to obtaining a solution through a specific study is identified. Eventually, the research study must be delimited to a problem statement which asks what relation exists between two or more variables.

This study was conducted in order to develop a prioritized list of research problem areas or topics as perceived by district and local vocational, technical and adult educators in Wisconsin.

Research Priorities: A research coordinating unit must continuously examine its priorities in performing its functions of stimulating, coordinating, facilitating, conducting and disseminating research.

According to Webster's Third New International Dictionary, one meaning of "priority" is the assignment of a preferential rating to certain items according to a relative need for each; or for its meriting attention prior to competing alternatives.

Financial support for research and development projects in education and vocational-technical education has been available for several years from multiple sources including federal, regional and state agencies. Each of these agencies has its own set of guidelines to aid the researcher in determining the appropriateness of seeking funds from that particular source.

Research studies arise from many different sources, e.g., administrators, faculty, students, boards, agencies, institutions, and other groups and individuals. Sufficient funds are seldom available to support all of the project applications submitted. Hence, there is a need for establishing priorities to facilitate more efficient use of funds available to support projects where the greatest need exists and in terms of the anticipated or expected impact.

Objectives: The objectives of this study were to:

 Develop a list of vocational education research areas or topics for inclusion in a survey instrument.



- 2. Develop a prioritized list of vocational education research areas or topics based on perceptions of vocational education administrative staff with various job titles in several areas of work.
- Prepare a report of the findings for use in improved planning; review, conduct and management of vocational education research in Wisconsin.

These objectives will be accomplished through various strategies, activities and procedures indicated in the next chapter.

#### CHAPTER II

#### METHODOLOGY

<u>Planning</u>: At the May 2, 1974 meeting of the Research Committee of the Wisconsin Association of Vocational, Technical and Adult Education Administrators, State Board research consultants indicated a need to "review, re-assess research needs and develop recommendations for priorities for FY's 1976 and 1977."

At its July 25, 1974 meeting the Research Committee developed a list of twelve potential objectives for study or implementation during the year. The Delphi Technique was used involving VTAE District Research and Development Administrators and state staff. A seven point semantic differential using poles of "important" "unimportant" was used in conjunction with a priority ranking of the 12 items by the respondents. The report of the study (1) indicates that "Review and revise state research priorities" ranks #4 in a list of six priority objectives.

Instrument Development: At the October 9, 1974 meeting, the Research Committee Chairman, appointed five subcommittees, including one for the "review and revision of state research priorities. " This subcommittee of Dr. Max Farming (Chairman), Richard Roder, Roland Krogstad, and Dr. Orville Nelson met at Mid-State Technical Institute on November 13, 1974 to develop a draft of a research instrument. This instrument was disseminated to all VTAE district research administrators for comments and suggestions.

At its December 13, 1974 meeting at Lakeshore Technical Institute the Research Committee approved the survey instrument with some revisions and agreed to conduct the survey in their respective districts.

The questionnaire includes 45 structured items in five categories of:
(1) Needs for Vocational Education, (2) Curriculum Development, (3) Instructional Learning Processes, (4) Students, and (5) Administration of Vocational Education. Each category allowed one blank space for an open-ended response. The five point Likert-type scale allows response ratings of "1 - No Priority - research not needed", "2 - Low Priority - little need for research," "3 - Average Priority - research needed but not essential", "4 - High Priority - research greatly needed", "5 - Extremely High Priority - critical need for research".

Population: The population included approximately five-hundred postsecondary vocational, technical and adult District Directors; District Administrators of Instructional Services, Student Services, Administrative Services, Research, Planning and Development; Division Heads, Deans, Associate Chairmen; Coordinators and Supervisors, and other administrative staff.

Data Collection: The survey instrument was duplicated through the RCU and 600 copies mailed from the State Board office on January 10, 1975 to the 16 VTAE District Research Administrators for conduct of the survey. Please refer to Appendices A and B.





Completed questionnaires were returned to the RCU prior to February 6, 1975. They were keypunched in the Bureau of Planning and Budget and sent to the Center for Vocational, Technical and Adult Education UW-Stout on February 7, 1975. Computer printouts were returned to the RCU on February 17, 1975. RCU staff tabulated the data into tables in this report for the subcommittee to present to the Research Committee on March 4, 1975.



<sup>(1) &</sup>quot;Priorities of Objectives of Research Committee of the Wisconsin Association of Vocational, Technical and Adult Education Administrators", Russell C. Paulsen, Ph. D. August, 1974, p.2.

Title	И	
District Director	12	
District Administrator of Instructional Services	12	
District Administrator of Research/Planning/Development	13	
District Administrator of Community/Field Services	13	
District Administrator of Student Services	13	
District Administrator of Administrative Services	9	
Coordinator or Supervisor	129	
Department or Division Chairperson, Dean or Associate Chairperson or Dean	87	
Other	72	
Total	360	



#### CHAPTER III

#### FINDINGS

Of the approximately six hundred questionnaires mailed to the Vocational, Technical and Adult Education (VTAE) districts for distribution to the approximately five hundred administrative staff, 360 (72%) were returned. Six were returned too late for inclusion in the study. The range of district response rates varied from 50% to 100% rate of returns.

Table 1 indicates that the largest number of respondents were employed in VTAE Districts #8 and #9 while the fewest questionnaires came from Districts #3 and #5.

Table 1

NUMBER OF RESPONDENTS BY VTAE DISTRICT

				•													
District: 1 N = 29	_	2	3	4	5	6	8	9	10	11	12	13	14	15	16	17	Total
N = 29	3 3	3Ī	13	26	11	28	37	48	20	16	18	21	17	17	14	14	360

Table 2 indicates the nature of the respondents by title of position. The largest number (129) being coordinators or supervisors. The "other" category included financial aids officer, librarians, curriculum specialists, systems analyst, special coordinator, registrars, guidance director, high school relations, research specialist, campus administrator, regional administrator, instructor-coordinator, special projects, assistant district director, area coordinator and others.

Table 2
NUMBER OF RESPONDENTS BY TITLE OF POSITION

Title	N .	
District Director	4	
District Administrator of Instructional Services	12	
District Administrator of Research/Planning/Development	12	
District Administrator of Community/Field Services	13	
District Administrator of Student Services	13 .	
District Administrator of Administrative Services	13	
Coordinator or Supervisor	9	
Department or Division Chairperson, Dean or Associate	129	
Chairperson or Dean	87	
Other	. 72	
Total	360	



Table 3 indicates the nature of the respondents by area of work. The largest number (115) being in general administration. The "other" category included adult education, student services, safety education, community relations, public information, institutional research, finance and business administration, data processing, public service occupations, apprenticeship, fire service, facilities, CETA, television, athletics, federal projects, ABE, food services, handicapped/disadvantaged, fire service, law enforcement and others.

Table 3

NUMBER OF RESPONDENTS BY AREA OF WORK

Area		И		
	<del></del>	<del></del>		
General Education		30		
Agriculture		13		
Business and Office Occupations		21		
Distributive Education		5	1	
Health Occupations		25		
Home Economics		20		
Trades and Industry		43		
General Administration		115		
Other		88		
* · · · · · · · · · · · · · · · · · · ·	Total	360	·	

Several respondents indicated more than one area of work. These respondents were placed either in general administration or in the "other" category. Some respondents which indicated both business and office occupations and distributive education were placed in the former category on the assumption it was more inclusive.

Table 4 indicates the rank order of the forty-five vocational education research areas/topics (questionnaire items) in terms of numerical values of means of state totals of responses for each item. The arithmetic mean is the central value which refers to the location of the center of the distribution. The medians are also included. These indicate the middle observation in a series of ranked items which is the same as the 50th percentile. The mode, the value which occurs most frequently in a distribution, is another central value of a distribution. Mode data for each item is available on the computer printouts but is not indicated in Table 4.

Data in Table 4 indicate that the top five research areas/topics are:
(1) Labor market requirements (2) Determining performance levels of competencies for job entry, (3) Assessment of individual's vocational, technical and adult education needs, (4) Open entry/open exit education, and (5) Student attrition/withdrawals, etc. The top sixteen items have means of 3.505 or higher which translates toward "4- High Priority - research greatly needed".

The five lowest ranking items are: (1) Student clubs, student government, etc, (2) Leisure, athletic or social activities, (3) Impact of research on research project staff, (4) Student health services, and (5) Countering sex sterotyping of occupational education programs. Two items have means of less than 2.500 which translates to "2 - Low - Prioity - little need for research". The remaining 27 items have means between 2.500 and 3.500 which translates to "3 - Average Priority - research needed, but not essential".

Table 4

RANKING OF 45 PRIORITIES OF VOCATIONAL EDUCATION RESEARCH AREAS/TOPICS
FOR WISCONSIN POSTSECONDARY VTAE 1975-77 BY RESPONSE MEANS

N = 360

Note: Numbers in () refer to item number on questionnaire. Responses to individual items ranged from, 331 - 335.

	7				
Rank/			Std.		
Item #	kesearch Area/Topic	Mean	De <b>v.</b>	Median	IQR
1(1)	Labor Market Requirements	3.979	0.869	.4.049	1.095
2(12)	Determining Performance Levels of Competencies for Job Entry	3.877	.948	3.984	1.131
3(4)	Assessment of individual's vocational, technical and adult education needs	3.736	.872	3.827	1.182
4(42)	Open entry/open exit education	3.701	.996	3.810	1.379
5(27)	Student attrition/withdrawals, etc.	3.637	.989	3.691	1,445
6 (28)	Student placement	3.634	.963	3.713	1.350
7(33)	Counseling Adults	3.619	.972	3.702	1.344
8(15)	Emerging technologies into programs	3.600	.912	3.688	1.266
9 (43)	Cost-Benefit Studies of VTAE programs	3.592	.893	3.610	1.336
10(24)	Barriers to enrollment in VTAE programs	3.587	1.022	3.661	1.501
11(13)	Determining Performance Levels of Competencies for Job Advancement	.,3.577	.978	3.694	1.355
12(44)	Educational programs, activities and services for disadvantaged/handicapped	3.544	.898	3.548	1.297
13(38)	Evaluation of Adult Programs and/or components	3.534	.876	3.557	1.280
14(29)	Student Follow-up procedures	3.514	.957	3.516	1.396
15 (25)	Advanced placement/standing	3.511	.915	3.463	1.364
16(14)	Secondary - Post-Secondary Curriculum Articulation	3.505	.948	3.545	1.352
17(7)	Educational Needs for Mid-Career individuals	3.484	.878	3.462	1.265
18(9)	Determining Content	3.476	.928	3.557	1.295
19 (37,)	Evaluation of post-secondary programs and/or components 12	3.463	.876	3.506	1.255

Table 4 continued

D1: /	Table 4 continued	<u> </u>			
Rank/ Item #	Research Area/Topic	Mean	Std. Dev.	Median	IQR
20 (40)	Evaluation of district organizational structure and administrative processes	3.441	1.019	3.404	1.495
21(36)	Evaluation of overall VTAE district	3.411	.868	3.391	1.236
22(49)	Determining professional development needs	3.346	.916	3.345	1.305
23.5(26)	Appraising student achievement and behavioral change	3.336	.885	3.332	1.292
23.5(10)	Developing Learning Activities	3.336	.937	3.329°	1.277
25.5(21)	Multi-Media approaches	3.313	.863	3.331	1.264
25.5(39)	External validation of mission, goals and objectives	3.313	.939	3.304	1.291
27(46)	Role of the post-secondary VTAE system relative to Chapter 89	3.267	.926	3.251	1.286
28(20)	Teaching Methods	3.258	.881	3.270	1.270
29(3)	Technological assessment	3.247	.828	3.260	1.139
30 (22)	Learner Management of Instruction	3.242	.921	3.236	1.266
31(5)	Educational Needs for 16-18 year olds	3.224	1.067	3.229	1.541
32 (48)	Evaluation of district professional personnel	3.201	1.002	3.216	1.355
33(19)	Applied Research in Teaching Styles	3.198	.920	3.201	1.278
34 (34)	Model for comprehensive student services	3.143	1.052	3.140	1.442
35(18)	Applied Research in Student Learning Styles	3.123	.970	3.153	1.291
36(16)	Models for Core Program Development	3.096	.947	3.099	1.213
37(11)	Sequencing of Content Modules	3.092	.863	3.085	1.070
38(6)	Educational Needs for the Incarcerated	3.042	.965	3.046	1.180
39 (41)	Differentiated staffing	2.994	. 875	3.018	1.066
40(2)	General Societal Needs, e.g., environment	2.965	.946	2.980	1.236
41(45)	Countering sex sterotyping of occupational education programs	2.791	1.034	2.803	1.436
42 (32)	Student Health Services	2.774	.951	2.820	1,264
43(47)	Impact of research on research project staff	2.561	.960	2.673	1.384
44(30)	Leisure, athletic or social activities	2.481	.972	2.441	1.396
45(31)	Student clubs, student government, etc. 9	2.467	.888	2.514	1.324

13
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Table 4 also indicates values for two measures of dispersion from the mean (scattering of the values of a frequency distribution from an average). These are the: (1) Standard Deviation (positive square root of the variance), and (2) Semi-Quartile Range or Inter-Quartile Range (IQR). The IQR is the positive difference between the 25th percentile and the 75th percentile.

Data in Table 4 indicate that the five items (in parenthesis) with the smallest Standard Deviations (highest central tendency or closest agreement) with corresponding ranks are: (4) 3, (36) 21, (21) 25.5, (3) 29, (11) 37. The six items with the largest Standard Deviations (least agreement) are: (24) 10, (40) 20, (5) 31, (48) 32, (34) 34, (45) 41.

Seven items with the smallest Inter-duartile Ranges (closest agreement) are: (1) 1, (12) 2, (4) 3, (3) 29, (11) 37, (6) 38, (41) 39. Six items with the largest IQR (least agreement) are: 27 (5), (24) 10, (40) 20, (5) 31, (34) 34, (45) 41.

One item which has high ranking and relatively close agreement is #4 "Assessment of individual's vocational, technical and adult education needs" which ranks third and has a relatively low standard deviation of .872 and an IQR of 1.182. Item #24 "Barriers to enrollment in VTAE programs" ranks 10th with a relative large standard deviation 1.022 and IQR of 1.501.

Item #11 "Sequencing of content modules" ranks low at 37th with relative close agreement with a standard deviation of .863 and and IQR of 1.070. Item #45 "Countering sex stereotyping of occupational programs" ranks low at 41st with relative disagreement with standard deviation of 1.034 and an IQR of 1.436.

Table 5 indicates rankings and numerical values of means of the research topics by title of position of the respondents in relation to the state-wide total rank order and mean values. Analyzing relative rankings with relative means horizontally will assist in assessing the relative importance placed upon the items by the various types of administrative, supervisory and management personnel. The data may be analyzed vertically within a given column to ascertain relative ranking and mean values for that group.

Data indicate that item #1 "Labor market requirements" was ranked #1 by the State, Administrators of Student Services, Coordinators and Supervisors, and those in the "other" category. Although the Administrators of Research/Planning/Development ranked item #1 as 5th, the mean of their responses was 4.15 which was 3rd highest for item #1. Item #1 ranked 7th by the Administrators of Instructional Services.

District Directors ranked item #43 "Cost-Benefit studies of VTAE programs" as #1 with a mean of 4.08. This item ranked #9 in the state total data with a mean of 3.59.

Administrators of Instructional Services ranked item #12 "Determining performance levels of competencies for job entry" as #1 with a mean od 4.00. This item ranked #2 in the state totals with a mean of 3.88.

Administrators of Research ranked item #24 "Barriers to enrollment in VTAE programs" as #1 with a mean of 4.38. This item ranked 10th in state totals with a mean of 3.59.



Administrators of Community and Field Services ranked items #42 "Open entry/ open exit education "with a mean of 4.23 and #33 "Counseling Adults" with a mean of 4.23 at the top. These items ranked 4th and 7th respectively in the state totals.

Administrators of Administrative Services ranked item #27 "Student Attrition/withdrawals, etc." as #1 with a mean of 4.00. This item ranked #5 in the state totals with a mean of 3.64.

Division heads and associates or assistants also ranked item #12 as #1 with a mean of 3.90.

There is almost complete agreement in the ranking of items #30 and #31 at 43rd or lower. Computer printouts indicating means, standard deviations, IQR's and model responses for each title of positions are available in the RCU for further analysis.

Table 6 indicates rankings and means of the research topics by area of work indicated by the respondents in relation to the state-wide total rank order and mean values. Reviewing relative rankings with relative means will assist in assessing the relative importance placed upon the items by the respondents in the various disciplines or subject areas of work.

Data indicate that item #1 "Labor market requirements" ranked #1 in the State, and those in general education, agriculture, business and office occupations, distributive education, trades and industry, and general administration. Mean values for the above groups ranged from 3.94 to 4.60.

Educators in health occupations and home economics ranked item #12 "Determining performance levels of competencies for job entry as #1 with means of 3.80 and 4.00 respectively. This item ranked #2 in the state totals with a mean fo 3.88.

Those in the "other" category ranked item #4 "Assessment of individual's vocational, technical and adult education needs" as #1 with a mean of 3.96. This item ranked #4 in the state totals with a mean of 3.74.

Rankings by educators in two or three areas tend to differ from the "norm" within the top ten ranked items.

There is almost complete agreement in the ranking of items #30 and #31 at 43rd or lower.

In addition to comparing data horizontally, the data may be reviewed vertically in a given column to ascertain relative ranking of items and mean values for that category. Computer printouts indicating means, standard deviations, IQR's and modal responses for each area are available in the RCU for further analysis.

Table 7 indicates the rankings and numerical values of means for each item for each district in relation to the state-wide total rank order and mean values. Analyzing relative rankings with relative means horizontally will assist in assessing relative importance placed upon the items by the various VTAE districts. The data may be analyzed vertically within a given column to ascertain relative ranking and mean values for that district.



Table 5

RANKING OF 45 PRIORITIES OF VOCATIONAL EDUCATION RESEARCH AREAS/TOPICS BY MEAN VALUES OF STATE TOTALS WITH CORRESPONDING RANK NUMBER AND V MEAN VALUES BY TITLE OF POSITION OF RESPONDENT - \*

\* Top row of numbers for each item refer to rank. Bottom numbers refer to means

rounded to nearest one hundredth.

<u>-</u>	ounded	to near	rest one	nunare			<del></del>			<del></del>
_	State		Admin		Admin	Admin	Admin		Div Hd	•
Item	Rank/	Dist	Inst	Admin	Cmty/Fld	Stdt	Adm	Coord/	or	•
No.	<u>Mean</u>	Dir	Svcs	R/P/D	Svcs	Svcs	Svcs	Supv	Assoc	Other
	1	4	7	5	3 .	1	3	1	2	1
1	3.98	4.00	3.55	4.15	4.17	4.45	3.86	4.05	3.89	3.89
	2	10.5	1	6	<b>10</b> /	3.5	9.5	2	1	5
12	3.88	3.67	4.00	4.08	3.77	4.00	3.63	4.00	3.90	3.63
	3	12.5	21.5	8.5	6.5		21			
4						11.5		3	3	3
	3.74	3.58	3.18	4.00	3.92	3.75	3.29	3.79	3.69	3.77
42	4	4	2	85	1.5	6	9.5	. 4	5	13
	3.70	4.00	3.75	4.00	4.23	3.92	3.67	3.76	3.62	3.45
27	5	12.5	15.5	2.5	12	6	1	14	4	7
27	3.64	3.58	3.25	4.31	3.69	3.92	4.00	3.55	3 <b>.6</b> 6	3.62
	6	20	15.5	8.5	12	10	5.5	8	12	. 4
28	3.63	3.27	3.25	4.00	3.69	3.77	3.75	3.70	3.49	3.73
,	7	16	25	13.5	1.5	2	19.5	17	16	8
33	3.62						.*			
		3.42	3.17	3:855	4.23	4.08	3.38	3.69	3.47	3.58
15	8	4	3	4	18.5	3.5	2	9	9	16
	3.60	4.00	3.73	4.23	3.53	4.00	3.88	3.62	3.51	3.38
43	9	1 ·	7	2.5	20.5	22.5	5	20	10.5	6
45	3.59_	4.08	_ 3.55	4.31	3.50	3.50	3.75	3.4 <b>7</b>	3.49	3.73
	10	4	21.5	1	20.5	28	8	18	10.5	2
24	3.59	4.00	3.18	4.38	3.50	3.33	3.71	3.47	3.49	3.79
	11	8	4	13.5	12	14	<u> </u>	5	15	21
13	3.58	3.75	3.64					_		5 ***
				3.85	3.69	3.69	3.50	3.74	3.48	3,27
44	12	8	15.5	11	24	8	24	15.5	13	9
	3.54	3.75	3.25	3.92	3.38	3,85	3.22	3.55	3.49	3.56
38	13	23	29.5	13.5	4	17.5	9.5	10	20	10
	3.53	3.25	3.00	3.85	4.08	3.62	3.67	<u>3.59</u>	3.40	3.54
29	14	27	. 25	25	17	27	10.5	12	6	12
23	3.51	3.09	3.17	3.54	3.58	3.38	3.63	3.57	3.55	3.48
	15	4	29.5	19.5	6.5	30	15	17	7	14
25	3.51	4.00	3.00	3.69	3.92	3.25	3.57	3.51	3.55	3.41
<del></del>	16	8	21.5	16.5	24	11.5	5.5	13	8	19
14		_								
	3.51	3.75	3.18	3.77	3.38	3.75	3.75	3.56_	3.52	_3.30
7	17	35	6	25	9	20	19.5	15.5	21	11
	3.48	3.00	3.55	3.54	3.83	3.54	3.38	3.55	3.38	3.50
9	18	30	18.5	19.5	14	22.5	18	11	14	20
	3.48	3.08	3.20	3.69	3.67	3.50	3.43	3.59	3.49	3 <b>.</b> 29
3.7	19	16	29.5	8.5	5	14	17	17	22	15
3.1	3.46	3.42	3.00	4.00	3.92	3.69	3.44	3.48	3.37	3.39
	20	35	32	25	27	34.5	30.5	6	19	17.5
40	3.44	3.00	2.91	3.54	3.31	3.08	3.00	3.69	3.41	3.31
				25						
36	21	14.5	29.5		8 .	24.5	16	19	18	23
	3.41	3.50	3.00	3.54	3.85_	3.46	3.56	3.45	3.44	3.24
49	22	25	35	16.5	15.5	20	38	22	23	25
	3.35	3.17	2.75	3.77	3.62	<u>3.54</u>	2.77	3.43	3.36	3.22
26	23.5	14.5	7	22	29	26	30.5	28	17	28
20	3.34	3.50	3.55	3.62	3.17	3.42	3.00	3.32	3.46	3.17
			<del></del>						<u></u> .	<del></del>



		<u>·</u>		Ta	ble 5 cont		· · · · · · · · · · · · · · · · · · ·			
* ***	State	25. 2	Admin	10.44.00	Admin	Admin	Admin	•	Div Hd	
Item	Rank/	Dist	Inst	Admin	Cuty/F1d		Adm	Coord/	or	
No.	Mean	Dir	Svcs	R/P/D	Svcs	Svcs		Supv	Assoc	Other.
10	23.5	30	27	19.5	30.5	20	9.5	<b>21</b> .	26	30
	3.34	3.08	3.09	3.69	3.15	3.54	3.63	3.44	3:32	3.14
21	25,5	19	7	35	27.	36.5	5.5	25	25	24
	3.31	3.33	3.54	3.31	3.31	3.08	3.75	3.33	3.33	3.23
39	25.5	35	35	13.5	35.5	. 9	26	23	. 30	17.5
<del></del>	3.31	3.00	2.75	3.85	3.00	3.83	3.11	3.38	3.25	3.31
46	27	23	38	19.5	35.5	16	3 <b>5</b> ···	24	33	26
	3.27	3.25	2.64	3.69	3.00	3.67	2.88	3.38	3.20	3.19
20	28	30	11.5	39	32.5	36.5	10.5	26	27	27
	3.26	3.08	3.45	3.23	3.08	3.08	3.63	3.32	<u>3.25</u>	3.18
3	29 ·	10.5	10	39	22	<b>3</b> 8	25	29	28	32
	3.25	3.67	3.50	3.23	3.42	3.00	<u>3.13</u>	3.27	3.26	3.11 1
22	30	35	18.5	25	32.5	33.	35	30	24	29
<del></del>	3.24	3.00	3.20	3.54	3.08	3.15	2.88	3.27	3.34	3.16 ·
5	31 ~	16	15.5	33.5	18.5	6	30.5	36.5	31	22
	3.24	3.42	3.25	3.38	3.54	3.92	3.00	3.06	3.24	3.26
48	32	25	33.	30	15.5~ ~	17.5	44	31	34	33
	3.20	3.17	2.83	3.46	3.62	3.62	2.55	3.23	3.18	3.13
19	33	23	13	30	35.5	31.5	27	27 ~	32	35
<del></del>	3.20	3.25	3.27	3.46	3.00	3.23	3.13	3.30	3.20	2.97
34	34	35	35	30	24	14	39	36.5	29	34
	3.14	3.00	2.75	3.46	3.38	3.69	2.75	3.06_	3.24	3.10
18	35	30	11.5	33.5	40	29	42.5	32	37	37
	3.12	3.08	3.45	3.38	2.77	3.31	2.63	<u>3.24</u>	<u>3.15</u>	2.89
16	36	30	39	30	42	34.5	37	33	35	38
	3.10	3.08	2.60	3.46	2.75	3.08	2.86	3.22	3.17	2.88_
1,1	37	38.5	21.5	39	30.5	24.5	30.5	34	40	36
<del></del> -	3.09	2.83	3.18	3:23	3.15.	3.46	3.00	3.22	2.98	2.94
6	38	25	38	39	.27	31.5	35	40	39	31
	3.04	3.17	2.73	3.23	3.31	3.23	2.88	<u>2.94</u>	3.06	3.14
41	39	41	25	39	35.5	45	22.5	39	36	39
	2.99	2.75	3.17	3.23	3.00	2.73	3.25	2.95	3.15	2.86
2		- 38.5	40	44.5		43.5	22.5	35	38	40
	2.97	2.83	2.58	2.69	2.77	2.77	3.25	3.08_	3.07	2.82
45	41	41	45	30	44	41	30.5	•	42	41
	2.79	2.75	2.18	3.46	2.58	2.83	3.00	<u>2.78</u>	2.82	2.77
32	42	43.	41	40	43	39	30.5	42	41	42
	2.77	2.42	2.50	3.08	2.69	2.92	3.00	2.73	<u>2.89</u>	2.73
47	43	41	44	36	40	40 -	45	·· 43	45	43
	2.56	2.75	2.25	3.25	2.77	2.91	2.22	2.63	2.43	2.46
30	44	45	43	43	38	43.5	42.5	45	43	44
	2.48	2.17	2.33	2.77	2.92	2.77	2.63	2.46	2.45	2.42
31	45	44	42	44.5		40	40	44	44	45
	2.47	2.25	2.45	2.69	2.50	2.83	2.71 .	2.49	2.44	2.36
•	•	•								



Table 6

RANKING OF 45 PRIORITIES OF VOCATIONAL EDUCATION RESEARCH AREAS/TOPICS BY MEAN VALUES OF STATE TOTALS WITH CORRESPONDING RANK NUMBER AND MEAN VALUES BY SUBJECT AREA OF WORK OF RESPONDENTS - \*

\* Top row of numbers for each item refer to rank. Bottom numbers refer to means which have been rounded to nearest hundredth.

		which	nave bee		a to n	earest nu	nareacn.			<del></del>
	State			Bus.			•		• .	
Item	Rank/	Gen.		&.	Dist	Health	Home		Gen.	
No.	Mean	Educ	Agri	Office	Educ	Occup.	Ec	T & I	Admin	Other _
1	1	1	1	1	1	3	2	1	1	2.5
1	<b>3.9</b> 8	4.08	4.33	4.10	4.60	3 <b>.7</b> 0	3.94	4.00	3.94	3.95
	2	2	2	4	6.5	1	1	4	4	2.5
12	3.88	4.07	4.15	4.00	4.00	3.80	4.00	3.85	3.71	3.95
	3	3	5.5	2	2.5	29.5	4.5	5	10	1
4	3.74	4.04		4.05	4.40	3.13	3.82	3.73	3.52	3.96
	4	7	5.5	16	21.5	38	9	2	2	7
42	3.70	3.8 <b>7</b>	3.77	3.67	3.40	2.86	3.64	3.95	3.75	3.68
	<u> </u>	4.5	21	13	4.5	20	13.5	23	3	12
27	3.64	3.97	3.42	3.71	4.20	3.33	3.50	3.40	3.73	3.60
	6	4.5	16	5.5	2.5			12.5	8	4
28	_	3.97				39.5	10			
	3.63			<u>3.90</u>	4.40	2.79	3.65	3.54	<u>3.57</u> .	3.7.8
33	7	11.5	16	3	10.5	23.5	11	11	9	6
	3.62	3.63	3.54	4:.05	3.80	3.29	3.63	3.55_	3.56	3.71
15	8	21	· 3	11	35.5	6.5	21	6	5.5	17
	3.60	3.43	3.85	3.76	3.00	3.63	3.37	3.71	3.65	3.55
43	9	16	19	24	29	5	18.5	9	5.5	11
	3.59	3 <b>.</b> 56	3.46	3.55	<u>3.20</u>	3.64	3.39	3.60	3.65	3.61
24	10	6	12	21	21.5	42.5	3	<b>19</b> .	7	5
	3.59	3.96	3.62	3.60	3.40	2.61	3.83	3.48	3.61	3.71
13	. 11	10	12	<b>1</b> 0 -	6.5	22	6	16.5	12	9.5
	<b>_3.5</b> 8	3 <b>.7</b> 0	3.62	3.81	4.00	3.32	3.79	3:49	3.48	3.64
44	12	8	12	25.5	35.5	10.5	7	24	13	9.5
44	3.54	3.83	3.62	3.48	3.00	3.48	3.74	3.38	3.46	3.64
20	13	25	5.5	19	21.5	23.5	16.5	7	11	8
38	3.53	3.30	3.77	3.62	3.40	3.29	3.40	3.67	3.50	3.66
	14	13	16	8.5	10.5	4	23.5	21	18	1.4
29	3.51	3.60	3.54	3.86	3.30	3.64	3.35	3.43	3.41	3.56
	15	9	29	15	10.5	·13	12	14	17	18
25	3.51	3 <b>.7</b> 8	3.15	3 <b>.7</b> 0	3.80	3.46	3.61	3.53	3.43	3.52
<del></del>	16	17	12	8.5	10.5	16.5	15.	22	16	13
14	3.51	3.55	3.62		3.80	3.38	3.42	3.41	3.43	3.56
	17	18	12	13	4.5	33	18.5	16.5	15	16
7	3.48	3.50	3.62	3.71	4.20	3.04	3.39_	3.49	3.45	3.55
<del></del>	18	22		7	21.5	16.5		8	19	19
9	3.48	3.37		3.90	3.40	3.38		3.63		3.49
	19	35	5.5	19	29	20		12.5	14	15
37				3.62			3.35 <sub></sub>			3.56
	3.46	3.13			3.20	6.5	27	_ <del>3.34</del>	3.45 26	21
40	20	30	23.5	5.5	10.5					
	3.44	3.23		3.90	3.80	3.63	3.32	3.88	3.22	3.44
36	21	32	19	13	35.5	10.5	20	10	20	24
	3.41	3.20		3.71	3.00	3.48	3.37	3.56	3.38	3.40
49	22	38	8.5	29	15.5	8	23.5	15	27	23
	3.35	3.07		3.33	3.60	3.55	3.35_	3.52	3.22	3.41
26	23.5	31	37	17	29	2	8	34	25	26
	3.34	3.23	3.00	<u> </u>	3.20	<u>3.76</u>	3.72	3.08	3.29	3.33



Table 6 continued

				Tabl	.e 6 cor	tinued_				_
	State'			Bus.		7. T. T.	·, -		4.	
Item	Rank/	Gen.		&	Dist	Health	'Home '	• •	Gen.	
No.	Mean	Educ	Agri	Office	Educ	Occup.	Ec	T & I	Admin	Other
<b>1</b> 0	23.5	26.5	22	22.5	15.5	15	33	31	21	27
	3.34	3.30	3.38	3.57	3.60	3.42	· 3.17	3.20	3.35	3.33
21	25.5	<b>2</b> 8	23.5	19	10.5	27.5	16.5	29	23	·. 31
	3.31	3.28	3.31	3.62	3.80	3.21	3.40	3.21	3.32	3.27
39	25.5	33	19	22.5	21.5	26	37	18	28	22
	3.31 -	3.17	3.46	3:57	3.40		3:•.05 :	3.48	3 <b>.1</b> 9.	3.44
46	27	14	25.5	<b>37</b> ′	15.5	36	4.5	36	30	20
	3.27	3.53	3.23	3.06	3.60	2.91	3.82	3.03	3.15_	3.46
20	28	39	33.5	34	15.5	27.5	23.5	26	24	28.5
	3.26	3.03	3.08	3.14	3.60	321	3.35	3.31	3 <b>.</b> .29	3.29
. 3	29	19	29	32	21.5	34	29	25	29	30
	3.25	3.48	3.15	3.25	3.40	3.00	3.28	3,34	3.17	<u>3.28</u>
22	30	15	33.5	30.5	21.5	18	13.5	<b>29</b> .	32	34
	3.24	3.57	3.08	<u>. 3.29</u>	3.40	3.35	3.50	3.21	3.14	3.19
5	31	24	37	25.5	29	39.5	34	32.5	22	33
	3.24	3.33	3.00	3.48	3.20	2.79	3.06	3.15	3.34	3.21
48	32	40	25.5	27	21.5	20	41	<b>2</b> 0	31	28.5
<del></del>	. 3.20	<u>2.77</u>	3.23	3.38	.3.40	3' <b>.</b> <u>3</u> 3	2.84.	3.45	3.14	3.29
19	33 ·	26.5	37	36	29	13	28.5	29	<b>3</b> 3	32
	3.20	3.30	3.00	3.10	3.20	.3.49	3:30 .	3.21	3.12.	3.22
34	34,	23	27	30.5	40	31	32	40	38	25 ·
	3.14	3.34	3.17	3.29	2.80	3.08	3.: 26.	2.88	2.98	3.39
18	35	20	39	35	35.5	9	28.5	38	36	<b>35</b>
	3.12	3.46	2.92	3.10	3.00	3.52	3.30	2.95	2.99	3.15
16	36	34	37	<sub>.</sub> 29	42	13	31	35	37	38
	3.10	3.15	3.00	<u>3.30</u>	2.75	3.49	3.27	3.08	2.99	3.08
11	37	36	40	33	29	29.5	39	32.5	34	36
	3.09	3.10	2.85	3.24	3.20	3.13	2.94	3.15	3.05	3.13
6	38	29	29	38.5	35.5	37	38 -	<b>7</b> ر	35	37
	3.04	3.27	3.15	3.00	3.00	. 2.83_	2.95	3.00:	3.02	3.09
41	39	37	42	40.5	40	32	35	27	39	40
	2.99	3.10	2.67	2.90	2.80	3.05	3.11	3'. 25	2.90	3.00
2	40	11.5	37	40.5	29	42.5	26	39	40′	39
	2.97	3.63	3.00	2.90	3.20	2.61	3.33	2.90	2.75	3.06
45	41	43.	41.5	43	45	34	40	42	41	41
	2.79	2.56	2.69	2.75	2.20	2.96	2.89	2.78	2.70	2.99
3 <b>2</b>	42	41	43	38.5	35.5	25	42	41	42	42
	2.77	2.67	2.54	3.00	3.00	3.25	2.58	2.88	2.60	2.87
47	43	45	44	44	43.5	41	.44	43	4:3	44
	2.56	2.18	2.46	2.55	2.40	2.62	2.28	2.73	2.59	2.64
30	44	42	45 1 77	45	43.5	44	43	45	44	43
	2.48	2.63	1.77	2.48	2.40	2.48	2.37	2.39	2.39	2.73
31	45	44	41.5	42	40	45	45	44	45	45
	2.47	2.33	2.69	2.80	2.80	2.38	2.12	2.44	2.37	2.61
					•					



Data indicate that item #1 "Labor market requirements" ranked #1 for the state-wide totals with a mean of 3.98 and VTAE districts #2, #4, #5, #8, and #10, with means ranging from 3.96 to 4.40. Districts #3, #9, #11, and #14 ranked item #1 as 7th, 6th, 6.5th and 11th with means of 3.75, 3.89, 3.73 and 3.53 respectively.

Districts #1 and #13 ranked item #12 "Determining performance levels by competencies for job entry:" as #1 with means of 3.97 and 4.05 respectively. This item ranked second in the state with a mean of 3.88.

District #14 ranked item #4 "Assessment of individual's vocational, technical and adult education needs" as #1 with a mean of 3.82. This item ranked third in the state with a mean of 3.74.

Districts #3 and #15 ranked item #42 "open entry/open exit" as #1 with means of 4.15 and 4.47 respectively. This item ranked #4 in state totals with a mean of 3.70.

District #12 ranked item #33 "Counseling adults" as #1 with a mean of 4.41. This item ranked 7th in state totals with a mean of 3.62.

District #9 ranked item #24 "Barriers to enrollments in VTAE programs" as #1 with a mean of 4.09. This item ranked 10th in state totals with a mean of 3.59.

District #6 ranked items #1 and #2 at the top at #1.5 with means of 4.00.

District #17 ranked items #1 and #42 at the top at #1.5 with means of 3.79.

District #11 ranked item #43 "Cost-Benefit studies of VTAE programs" as #1 with a mean of 4.13. This item ranked #9 in state totals with a mean of 3.59.

District #16 ranked item #2 "General societal needs, e.g., environment" as #1 with a mean of 3.86. This item ranked 40th in state totals with a mean of 2.97. District 16's data was verified by hand calculations. Rank numbers are omitted due to the questionnaire used having 35 items instead of 45. Computer printouts indicating means, standard deviations, IQR's, and modal responses for each district are available in the RCU for further analysis.





Table 7

RANKING OF FORTY-FIVE PRIORITIES OF VOCATIONAL EDUCATION RESEARCH AREAS/TOPICS
BY NUMERIAL VALUES OF MEANS OF RESPONSES TO EACH ITEM FOR STATE TOTAL WITH CORRESPONDING
VIAE DISTRICT RANK AND MEAN VALUES\*

N=360

\*Top row or numbers for each item refer to rank. Bottom numbers refer to means rounded to nearest hundredth.

	State																
Item No.	Rank/ Hean			•	> '	TAE Di	strict	Rank	and Me	VTAE District Rank and Mean Values	ග						
		Ħ	2	ო	#	2	9	8	σ	10	11	12	13	14	15	16	17.
-	1	2	1	7	r-1	1	1.5	-	9	1	6.5	2	2		3.5		1.5
7	3.98	3.86	4.23	3.75	3.96	4.40	4.00	4.08	3.89	4.15	3.73	4.33	3.86	3,53	4.00	3,50	
12	2	1	2		2.5	3.5	1.5	2	7	2	က	3.5	1	2	5	4	20.5
	3.88	3.97	4.16	3.75	3.80	4.18	4.00	3.97	3.96	3.95	3.93	90.4	4.05	3.76	3.88	3.29	3:14
<b>+</b>	က	<b>†</b>	4.5	•	6	6	6	3	6	<b>‡</b>	13	3.5	7	1	13.5		12
	3.74	3.71	3.87	3.69	3.56	4.00	3.71	3.81	3.80	3.80	3.40	90.4	3,75	3.82	3,53	3.50	3,36
110	<b>1</b>	6.5	17	1	20	5.5	7	11	ω	1	<b>+</b>	13	8.5	6			1.5
7	3.70	3.62	3.48	4.15	3.44	4.09	3.78	3.47	3.86	3.80	3.88	3.67	3,65	3,59	74.4	3,36	
27	വ	17.5	4.5	4.5	31.5	2	ħ	6	က	34	2	9	25	25	7		9.5
	3.64	3.38	3.87	3.77	3.28	4.30	3.93	3.62	4.02	3.20	3.80	00.4	3,30	3,35	3.71	1	3,43
28		ى ق	7	17.5	25	12.5	3	10	7	7.5	26.5	8	15	3.5	17.5	,	7
	3.63	3.52	3.71	3.46	3.36	3.91	3.96	3.59	3.87	3,65	3.13	3.88	3,45	3.71	3.47		3.50
33		17.5	ထ	9,5	16	21	11	12	2	10.5	10	-	10.5	6	21	,	20.5
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# Table 7 continued

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#### COMMENTS, SUGGESTIONS AND OTHER TOPICS

In addition to the structured responses, several other topics, comments and suggestions were indicated on the returns. These are not edited and are indicated as they appeared on the questionnaire. The responses are grouped by questionnaire item number.

#### Item #1

- . If broken down into more specific job or occupational description. EG, Foods: kitchen workers, waitresses, short order cooks, cooks, managers, etc.
- . Esp. for Ag. Business grads (& farmers affected by high prod. costs when becoming established in farming).
- . I utilize the research findings in advising prospective students as well as learning names of unemployed graduates.
- . i.e., Special skills needed as well as number of persons needed in primary and related jobs.
- . as determined by Hospitals vs. Mursing Homes.

#### Item #3

- . For job entry requirement.
- . Please define
- . I don't know what you mean here.
- . What's that?

#### Item #8

- . Middle Aged "involuntary retirees".
- . Displaced workers.
- . Disadvantaged Handicapped.
- . Educational needs of the elderly within the State.
- . Handicapped.
- . Associate degree in recreation.
- . Adult Education Course Needs. Extension Education Needs.
- . Career Ed.
- . Ladder Training Concepts.
- . Adult Women V.T.A. Needs.
- . Need for instruction in industry (upgrading).
- Educational progression opportunities within careers.



) 2

#### Item #8 (Continued)

- . Gifted Smart.
- . Assessment of elementary and secondary preparedness for Higher Ed.
- . Ed. needs of Farm Training Program Graduates of VTAE program. Very critical need by all VTAE districts.
- · Disadvantaged.
- Handicapped.
- . Dis. & Handi.
- . Senior Citizens Needs.
- . Graduates.
- . Educational Needs of 30-50 year-old women.
- . Upward Mobility of Minorities & Women.
- . Educ. needs Handicapped.
- . Cont. Ed. needs.
- . Minorities (visible)
- . Assessment and Career Education Needs of Handicapped.
- . Industrial training needs Industry viewpoint.
- . Part Time farmers.
- . Bilingual vocational education.
- . Senior Citizens Retired.
- . New jobs in decreasing economic condition.

#### Item #17

- . Keeping all districts informed on what is being developed in other districts and dispersal of info. Continued research and updating.
- . Three semester or 12 month school.
- . Proper use of "Academic World" in Voc. Ed. programs. Example no longer day of bird house math or (Fudge 1 & Fudge 2 in Home Ec.).
- . Water and Waste Water and related environmental areas as related to Ag.
- . Continuing Education. How to implement same in VTAE system.
- . Funding (Sources) for curriculum development.



#### Item #17 (Continued)

- . Identification of Minimum Learning Steps Toward Reaching a Particular Objective.
- Modifying General Education courses to accommodate needs of students in various programs.
- Refining the document & implementation of the Competency Based Food Service Curriculum if this is done well it can be a model for others done within the State & Nationally.
- . Ladder Training Concept, i.e.: Nurse Aide to Practical Nurse to Registered Nurse to Physician ....
- . Articulation with base level programs (upward mobility).
- . State developed curriculum to eliminate duplication of effort.
- . Articulation of Vocational and College or University programs.
- . Dev. competency tests.
- . Developing new programs
- . Meet with representatives of Wisconsin Towns association and municipal organization for educational direction.
- . Task Analysis.
- . Content distribution.

#### Items #18 thru 22

- . These are all being done on current institutions of Higher Ed.
- . Relating course content to job skills required by employers Very high.
- . Applied Research in Teaching Styles Esp. for ..dult program instructors.
- . #22 I don't know what this means.

#### Item #23

. College of the Air Open Learning.

. How to teach adults.

. Need of Science department at NWTI.

. Study habits.

. Learner utilization of resources.

- Pre-Testing
- . On-the-job training cooperative efforts.
- Identifying students (and their characteristics) who can use individual learning techniques effectively. Add: How to motivate and teach perpetual welfare and poverty level persons saleable job skills. High priority.
- Implementation of Competency based curriculum Food Service.



#### Item #24

· Tuition.

#### Item #26

- Educational achievement and behavioral change and that needed in relation to job entry requirement.
- . Subject to programs and job entry req.

#### Item #27

- Already know.
- FTP dropout study I did on this could be updated soon.
- . Each program should do their own.

#### Items #28 and 29

- . Student placement and follow-up Piggyback check list re: skills required on job entry of Prac. Nurse and progressive expansion of skills.
- . Student follow-up With special input from each prog.

#### Item #32

- . These are essential, great need for research is not apparent.
- . Needed. Get the person on.

#### Item #33

- . What's that bad question.
- . Counselling adults and all students.

#### Item #35

- . Counseling part-time students.
- . Advertising of programs to high school students.
- . Program promotion.
- . Job development.
- . Staff Health Services.
- . Credit by Examination.
- . Requirements that we need at NWTI to start 2-year H. Occ. programs.
- . Open admissions and its consequence.
- Developing leadership skills, etc. among students.



#### Item #39

. We are professionals and we don't need this - our goals are understood.

#### Item #40

· MPTI new organ. chart for next year.

#### Item #41

. Differentiated staffing - ? ? ? ?

#### Item #43

. Ag. programs - esp. Farm Training. Very critical now.

#### Item #44

- . They know the problems we do too. Let's have some commitment.
- . Educational programs, activities & services for disadvantaged/handicapped.

#### Item #45

- . I believe affirmative action counseling to counteract sex role stereotyping is of utmost importance. More women in metallurgy, more men in nursing.
- . Countering sex sterotyping of occupational ed. programs.

#### Item #46

. Informative.

#### Item #47

- . Impact of research on research project staff ? ? ? ? ?
- . Don't understand statement.

#### Item #49

- . Some needs have already been expressed and presented in H.O. and Nsg.
- . U. W. Ag. Ed. Dept. now doing this one for Ag. tchrs. See Dr. Mattison at U. W.-Mad., CAVE Dept. on this one.

#### Item #50

- . Determining Professional Development needs of mid-management. Development needs and the total management team.
- . Eval. of State Prof. Staff. Eval. of activities of State Staff.
- . Use of Educ. TV for home study.
- . Evaluation of curriculum.





#### Item #50 (Continued)

- . Evaluation of District PR programs
- . Grant Applications and Availability.
- . Indirect costs, aidable non-aidable cost study.

#### COMMENTS

- . Under Administration of Vocational Education the following numbers were starred (\*) 36, 37, 38, 39, 40, 47, 48, 49 with the following comment:
  - \* Left to each individual school in the form of self-evaluation. In these areas I feel that only the District can evaluate its own performance with any degree of consistance. For example, #48 is difficult to do on a continual year-round basis much less on a periodic state visit.
- . The research suggested should be done by local district personnel <u>not</u> given to the centers where uninformed and uninterested people get lost in our goals and missions.
- . How about a project relating to a Tele-communications system alla U-W Extension. It could be hooked up with copying machines 8 computers. Would save travel money.
- . Some of those identified need work, however it may not be research.
- . Note "other" under B-17. Coop between College and VTAE is going on in other States. "Academics" are necessary used right.
- . Good instrument.
- . Studies on Apprenticeship (Upgrading for Supervision, etc.). Research on Tuition re: fund programs by employers.
- . A problem I have with this instrument is the lack of indication of who will do the research and for what purpose a focus on local research has differing indication from research conducted which involves all districts.
- . Evaluation of overall VTAE promotional mission.
- . Thanks for this opportunity to respond.
- . This seemed like a pretty good questionnaire. Keep up the good work.
- . Ways to reach dropouts. Find out if a H. O. instructor without a F. S. would like to go to U. of Georgia (for Allied Health).
- . Need of equivalent night course for Dental Assistants who are employed. Need for night classes in other areas of Health Occup.
- . As indicated above, items 36, 40, & 43 should be given proper attention!!
- . What is going to be done with this study when it is completed at the state level. Any reaction expected?



 $25 \qquad 29$ 

#### COMMENTS (Continued)

- . I have done quite a bit of research particularly with U. W. Dept. of Ag. Education and Dept. of Educ. Administration. I'd like opportunity to discuss possible fed. project financing for Ed. Specialist degree dissertation I'll be doing this spring and summer.
- . Some topics poorly defined.
- Research the programs graduating few students with high intitial enrollments; e.g., consideration to length of program, job competencies, etc.
- . Inservice training for staff development. Legal implications for administrators and managers.
- . I believe that if we are to be concerned with overall student development, we must be concerned with developing our offering areas to develop beneficial leisure time activities and interests. If hourly work weeks keep decreasing what are we doing to help an individual to utilize extra leisure time constructively.
- . At the State Board of Nursing meeting Jan. 15, in response to a question concerning the future of our P. N. program, I assured them that research would be carried out to determine actual need for LPN employment in health agencies within Lakeshore District.
- . Funding of Ed. Services. Restructuring of State VTAE Admin. Standardizing methods of reporting and operations of All Districts.

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#### CHAPTER TV

#### SUMMARY, CONCLUSIONS, RECOMMENDATIONS

#### Summary:

The purpose of this study was to determine priority areas for research in Wisconsin's postsecondary vocational, technical and adult education system for FY's 1975-1977.

A survey of nearly five-hundred district administrative and supervisory staff was conducted through the use of network of district research and development administrators during January 1975. A forty-five item, five-point Likert-type questionnaire was developed by a subcommittee of the Research Committee of the Wisconsin Association of Vocational, Technical and Adult Education Administrators. Three hundred and sixty returns were processed through UW-Stout and tabulated by the RCU.

Rank orders of research areas were developed on the basis of numerical values of means for each item for the state total, by title of job, area of work, and by VTAE district. Medians, standard deviations and inter-quartile ranges were also tabulated.

The top ten priorities based on total state data are: (1) Labor Market Requirements, (2) Determining Performance Levels of Competencies for Job Entry, (3) Assessment of Individual's Vocational, Technical and Adult Education Needs, (4) Open Entry/Open Exit Education, (5) Student Attrition/Withdrawals, etc., (6) Student Placement, (7) Counseling Adults, (8) Emerging Technologies into Programs, (9) Cost-Benefit Studies of VTAE Programs, and (10) Barriers to

Mean values and item rankings varied noticeably among respondents by title of position, area of work and VTAE district.

Findings can be used by administrators, researchers, and project review committees.

#### Conclusions:

Enrollment in VTAE Programs.

The values of means and rankings for each item varied among respondents by title of position, e.g., Item 1 "Labor Market Requirements" was ranked 1st by the State, Administrators of Student Services, Coordinators and Supervisors, and those in the "other" category while it was ranked 5th by Research Administrators and 7th by Administrators of Instructional Services.

The values of means and rankings for each item varied among respondents by area of work, e.g., Item 1 "Labor Market Requirements" was ranked 1st by the State, and those in General Education, Agriculture, Business and Office Occupations, Distributive Education, Trades and Industry, and General Administration, while educators in Health Occupations, Home Economics, and the "other" category ranked items 12 and 4 as #1 priority.

The values of means and rankings for each item varied among respondents by VTAE district, e.g., Item #1 ranked 1st for state-wide totals and districts 2, 4, 5, 8, and 10, while districts 1, 3, 6, 9, 11, 12, 13, 14, 15, & 17 ranked item 1 as 2nd, 7th, 1.5th, 6th, 6.5th, 2nd, 2nd, 11th, 3.5th, and 1.5th respectively.

The instrument developed and the procedures followed were an effective means to determine research pricrities as perceived by practitioners.



#### Recommendations:

It is recommended that the findings of this report be studied by administrators to assist in issuing requests for proposals; by researchers and practitioners to facilitate the selection of problems to be studied; by project review panel members to facilitate evaluation, approval, modification and disapproval of project applications, and by the Research Committee of the Wisconsin Association of Vocational, Technical and Adult Education in developing its recommendations for research priorities.

In order to delimit the chosen problem area to a researchable problem, it is necessary to become familiar with existing theory, practice and research pertaining to the area. In planning and conducting a research study the following summarized steps, adapted from (2), are suggested:

- I. Select a problem area from the current list of research priorities developed by the funding agency.
- II. Define the research problem.
  - A. Delimit the problem area (statement of the problem is an interrogative sentence or statement that asks: What relation exists between two or more variables?)
  - B. Select modifying variables
  - C. State the problem in operational terms
- III. Specify objectives, questions or hypotheses
  A Hypothesis is a conjectural statement of the relation between
  two or more variables stated in declarative sentence form.
- IV. Develop the research design or the methodology, procedures and schedule of activities to accomplish the objectives, answer the questions, or test the hypothesis.
  - A. Define the population
  - B. Select the sample
  - C. Plan the data to be collected and the collection procedure
  - D. Plan the statistical analysis
- V. Collect the necessary data
- VI. Perform the statistical analysis (to arrive at concluding beliefs about each objective)
- VII. Synthesize the decisions concerning each objective to attain a "solution" to the problem; draw implications about the principles or generalizations employed in stating objectives, and to the problem area, to educational practice, and to further research.



<sup>(2)</sup> Adapted from "Selecting and Developing a Research Problem," Technical Report, Vol. 1, No. 2, University of Minnesota, Research Coordination Unit in Occupational Education, Suptember, 1967, pp 12-13.

#### APPENDIX A

### -Questionnaire-

## PRIORITIES OF VOCATIONAL EDUCATION RESEARCH ACTIVITIES For Wisconsin 1975-1977

1.	District	· .	Sc	hool/Car	npus		<u>.</u>		··			
2.	What is t	he title of y	your present po	sition?	•							
	2. 3. 4. 5. 6.	District Adm District Adm District Adm District Adm Coordinator Department of Chairperson	ministrator of ministrator of ministrator of ministrator of ministrator of or Supervisor or Division Cha or Dean	Research Communit Student Administ	h/Pl ty/F Ser trat	anning, ield Se vices ive Sen	/Developmervices					
3.	In which	area do you d	do the greater	part of	you	r VTAE	work?					
	2. 3. 4. 5. 6. 7.	General Educ Agriculture Business and Distributive Health Occup Home Economi Trades and I General Admi Other (speci	d Office Occupa Education Dations ics Industry inistration	tions			•					
Please place an "x" in a space 1 through 5 for each numbered item corresponding to your rating in terms of need for research through the next 2 years. Specify additional topics in blank spaces.												
							Ratir	igs				
Voca	ational Edu	cation Resea	rch Area/Topic	No Priority - Research	101	Low Priority - Little need for research	Average Priority - Research needed but not essential	High Priority - Research greatly needed	Extremely High Priority - Critical need for research			
<u></u> -	- <del></del>			1	L	2	3	4	5			
Α.		VOCATIONAL E r Market Requ	•				· ·		•			



				•	Ratings	<del></del>	
Vo	cation	nal Education Research Area/Topic	Priority	w Priority	Average Priorit	High Priority	Extremely High Priority
,			2 1	2 2	3 A A V		- E - E - E - E - E - E - E - E - E - E
					<del>                                     </del>	- +	3_
	2.	General Societal Needs, e.g., environment	***************************************	-			
	3.	Technological assessment					
·	4.	Assessment of individual's vocational, technical and adult education needs					
	5.	Educational Needs for 16-18 year olds	**		# <u></u>	• .	
	6	Educational Needs for the Incarcerated	· .	-		·	
	7.	Educational Needs for Mid- Career individuals	. •				
	8.	Other:			<u>.</u>		
В.	CURR	ICULUM DEVELOPMENT		• .			
•	9.	Determining Content	. ***				
	10.	Developing Learning Activities			***************************************		tin in il mainte assesses
	.11.	Sequencing of Content Modules			<del></del>		
	12.	Determining Performance Levels of Competencies for Job Entry	٠	P	4.5		
	13.	Determining Performance Levels of Competencies for Job Advancement			-		•
	14.	Secondary - Post-Secondary Curriculum Articulation					
	15.	Emerging technologies into programs	<u> </u>	ووستناسب وروب	· ·		
•	16.	Models for Core Program Development			<u></u> .		
	17.	Other:				·	



 Vo		·		·	<u> </u>		
	catio	onal Education Research Area/Topic	Priority	Priority	Priority	Priority	ely High :y
· · · · · · · · · · · · · · · · · · ·			No Pric	Low Pr	ω Average	F High Pr	Extremely Priority
C.	INST	RUCTIONAL LEARNING PROCESSES				4	<u> </u>
	18.	Applied Research in Student Learning Styles					
•	19.	Applied Research in Teaching Styles					
	20.	Teaching Methods		· .			
	21.	Multi-Media approaches					
	22.	Learner Management of Instruction					
	23.	Other:					
D.	STUD	ENTS					
	24.	Barriers to enrollment in VTAE programs	<u> </u>				
	25.	Advanced placement/standing	) - 1.				
-	26.	Appraising student achievement and behavioral change					
	27.	Student attrition/withdrawals, etc.	<u> </u>	.v -			
	28.	Student placement	***************************************				
	29.	Student Follow-up procedures					
	30.	Leisure, athletic or social activities			-		-
	31.	Student clubs, student gov't, etc.	·				<u></u>
	32.	Student Health Services			<del></del>		
	33.	Counselling Adults					
	34.	Model for comprehensive student services					
	35.	Other:	_	. =			<del></del>



				•	Ratings	3	
V	ocatio	onal Education Research Area/Topic	No Priority	⊳Low Priority	ωAverage Priority	High Priority	Extremely High
Ε.	ADMI	NISTRATION OF VOCATIONAL EDUCATION			<del></del>		
	36.	Evaluation of overall VTAE district					
	37.	Evaluation of post-secondary programs and/or components	• ·				
	38.	Evaluation of Adult Programs and/or components		1		· ·	
	39.	External validation of mission, goals and objectives					-
	40.	Evaluation of district organiza- tional structure and administrative processes	-	, , , , , , , , , , , , , , , , , , ,	N 4	•	
	41.	Differentiated staffing					
	42.	Open entry/open exit education	**************************************	·		***************************************	-
	43.	Cost-Benefit Studies of VTAE programs		<del></del>			
	44.	Educational programs, activities and services for disadvantaged/handicapped					
. •	45.	Countering sex sterotyping of occupational education programs		-			
	46.	Role of the post-secondary VTAE system relative to Chapter 89					
	47.	Impact of research on research project staff				·, .	
	48.	Evaluation of district profes- sional personnel		<u></u>	1	-	
	49.	Determining professional develop- ment needs		· ·			
	50%	Other:					
		4					_

COMMENTS/SUGGESTIONS:



January 10, 1975

To the District Directors
Wisconsin Vocational, Technical
and Adult Education

Dear Colleague:

The Research Committee of the Wisconsin Association of Vocational, Technical and Adult Education Administrators has determined that one of the objectives to be accomplished this year is a re-assessment of vocational education research priorities for Wisconsin.

It has been approximately three years since a comprehensive study of research problems and priorities was conducted through UW-Stout.

The committee and the State Board would appreciate completion of the enclosed questionnaires by the following: (1) District Director, (2) District-level Administrators, and (3) Division or Department Chairman, Deans, Associate Chairman, Associate Deans, Coordinators, Supervisors, and any other administrative and management level personnel. The latter group should also indicate his/her vocational discipline or service area, e.g., Eusiness, Office, Distributive Education, E., Health Occupations, Home Economics, Trade and Industry, Fire Services, General Education, etc. Respondents are encouraged to indicate additional research topics.

Please rate each item in terms of need for research as follows: (1) No Priority - research not needed, (2) Low Priority - little need for research, (3) Average Priority - research needed but not essential, (4) High Priority - research greatly needed, and (5) Extremely High Priority - research critically needed. A supply of questionnaires has been mailed to your administrator of Research and Planning.

The findings of this survey will be very helpful in planning and coordinating research which the respondents feel is the highest priority. Requests for proposals (RFP's) in high priority areas will be distributed to VTAE districts and other institutions.

Please return the completed questionnaires to the RCU in our office before January 31, 1975.

If you have questions, please contact Roland Krogstad of our office, 608-266-3705.

Sincerely,

Eugene Lehrmann State Director

EL/RK/mt

Enc.

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